

Name	Mag	Sidereal Hour Angle												Declination														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Alrai	3.2	5	04.8	05.4	05.8	05.7	05.2	04.4	03.6	02.8	02.5	02.4	02.7	03.3	77	41.4	41.3	41.1	41.0	40.9	40.8	40.9	41.0	41.2	41.4	41.6	41.7	
Lambda Andromeda	3.9	5	29.9	30.1	30.1	30.0	29.9	29.6	29.3	29.0	28.8	28.8	28.8	29.0	46	30.7	30.6	30.5	30.4	30.4	30.4	30.5	30.6	30.8	30.9	31.0	31.1	
98 Aquarius	4.0	9	08.2	08.3	08.3	08.2	08.1	07.9	07.6	07.4	07.2	07.2	07.3	07.3	-20	03.1	03.1	03.1	03.0	02.9	02.8	02.7	02.6	02.6	02.7	02.7	02.8	
Gamma Tucana	4.0	10	30.6	30.8	30.8	30.7	30.5	30.1	29.7	29.4	29.2	29.2	29.3	29.5	-58	11.4	11.3	11.2	11.0	10.8	10.7	10.6	10.7	10.8	10.9	11.0	11.1	
Gamma Pices	3.7	10	35.4	35.5	35.5	35.4	35.3	35.0	34.8	34.6	34.4	34.4	34.5	34.5	3	20.0	19.9	19.9	19.9	20.0	20.0	20.1	20.3	20.3	20.4	20.4	20.3	
Iota Grus	3.9	12	16.9	17.0	17.0	16.9	16.7	16.4	16.1	15.8	15.7	15.7	15.8	15.9	-45	12.0	12.0	11.9	11.7	11.6	11.5	11.4	11.4	11.4	11.5	11.6	11.7	
88 Aquarius	3.7	12	31.0	31.1	31.1	31.0	30.8	30.6	30.3	30.1	30.0	29.9	30.0	30.1	-21	07.5	07.5	07.4	07.3	07.2	07.1	07.0	07.0	07.0	07.0	07.1	07.1	
Markab	2.5	13	41.8	41.9	41.9	41.8	41.6	41.4	41.1	40.9	40.8	40.8	40.9	40.9	15	15.4	15.3	15.2	15.2	15.2	15.3	15.4	15.5	15.6	15.7	15.7	15.7	
Scheat	2.5	13	56.8	56.9	56.9	56.8	56.6	56.4	56.1	55.9	55.8	55.8	55.8	55.9	28	08.1	08.0	07.9	07.9	07.9	07.9	08.0	08.2	08.3	08.4	08.5	08.5	
Omicron Andromeda	3.6	14	25.0	25.1	25.2	25.1	24.8	24.6	24.3	24.0	23.9	23.9	24.0	24.1	42	22.7	22.6	22.5	22.4	22.4	22.4	22.5	22.7	22.8	23.0	23.1	23.1	
Fomalhaut	1.2	15	27.7	27.8	27.8	27.6	27.5	27.2	26.9	26.7	26.6	26.6	26.7	26.8	-29	34.6	34.5	34.5	34.4	34.2	34.1	34.1	34.0	34.0	34.1	34.2	34.2	
Skat	3.3	16	13.0	13.1	13.0	12.9	12.8	12.5	12.3	12.1	12.0	12.0	12.0	12.1	-15	46.4	46.4	46.4	46.3	46.2	46.1	46.0	46.0	45.9	46.0	46.0	46.0	
Lambda Aquarius	3.8	16	43.7	43.7	43.7	43.6	43.4	43.2	43.0	42.8	42.6	42.6	42.7	42.8	-7	31.9	31.9	31.9	31.9	31.8	31.7	31.6	31.5	31.5	31.5	31.5	31.5	
Sadalbari	3.5	17	23.4	23.5	23.5	23.4	23.2	23.0	22.7	22.5	22.4	22.4	22.5	22.6	24	39.1	39.0	39.0	38.9	38.9	39.0	39.1	39.2	39.4	39.4	39.5	39.5	
Iota Cepheus	3.5	17	30.4	30.7	30.7	30.6	30.2	29.8	29.3	29.0	28.8	28.9	29.1	29.4	66	15.2	15.1	14.9	14.8	14.7	14.7	14.8	15.0	15.2	15.4	15.5	15.6	
Epsilon Grus	3.5	17	43.5	43.6	43.6	43.4	43.2	42.9	42.5	42.3	42.1	42.1	42.3	42.4	-51	16.4	16.3	16.1	16.0	15.8	15.7	15.7	15.7	15.8	15.9	16.0	16.0	
Lambda Pegasus	4.0	18	15.5	15.6	15.6	15.5	15.3	15.0	14.8	14.6	14.5	14.5	14.6	14.7	23	36.9	36.9	36.8	36.7	36.7	36.8	36.9	37.1	37.2	37.3	37.3	37.3	
Matar	2.9	19	08.7	08.7	08.7	08.6	08.4	08.2	07.9	07.7	07.6	07.6	07.7	07.8	30	16.3	16.2	16.1	16.0	16.0	16.1	16.2	16.4	16.5	16.6	16.7	16.7	
Beta Grus	2.1	19	11.9	12.0	12.0	11.8	11.6	11.3	11.0	10.7	10.6	10.6	10.7	10.9	-46	50.4	50.3	50.2	50.1	49.9	49.8	49.8	49.8	49.9	50.0	50.1	50.1	
Homam	3.4	19	31.3	31.4	31.3	31.2	31.1	30.8	30.6	30.4	30.3	30.3	30.4	30.4	10	52.8	52.7	52.7	52.7	52.7	52.8	52.9	53.0	53.1	53.2	53.2	53.2	
Alpha Lacerta	3.8	22	05.3	05.4	05.4	05.2	05.0	04.7	04.4	04.1	04.0	04.1	04.2	04.4	50	20.0	19.9	19.7	19.6	19.6	19.6	19.8	19.9	20.1	20.2	20.4	20.4	
Delta Grus	4.0	22	32.9	32.9	32.9	32.7	32.5	32.2	31.9	31.7	31.6	31.6	31.7	31.9	-43	27.1	27.1	26.9	26.8	26.7	26.6	26.5	26.5	26.6	26.7	26.8	26.8	
Zeta Aquarius	3.7	22	40.6	40.6	40.6	40.4	40.2	40.0	39.8	39.6	39.5	39.5	39.6	39.7	0	01.6	01.6	01.5	01.6	01.6	01.7	01.8	01.9	02.0	02.0	02.0	02.0	
Sadachbia	3.9	22	28.2	28.2	28.2	28.0	27.8	27.6	27.4	27.2	27.1	27.1	27.2	27.3	-1	20.5	20.5	20.5	20.5	20.5	20.4	20.3	20.2	20.1	20.1	20.1	20.1	
Alpha Tucana	2.9	25	13.3	13.4	13.4	13.2	12.8	12.4	12.0	11.7	11.6	11.6	11.9	12.1	-60	13.1	13.0	12.8	12.6	12.5	12.4	12.4	12.5	12.6	12.7	12.8	12.8	
Zeta Cepheus	3.3	27	12.9	13.0	13.0	12.8	12.5	12.1	11.8	11.6	11.5	11.6	11.8	12.0	58	15.0	14.9	14.7	14.6	14.6	14.6	14.7	14.9	15.1	15.3	15.4	15.4	
Baham	3.5	27	20.2	20.2	20.2	20.1	19.9	19.6	19.4	19.2	19.1	19.2	19.3	19.3	6	14.6	14.5	14.5	14.5	14.5	14.6	14.7	14.9	14.9	15.0	15.0	15.0	
Alnair	1.8	27	48.0	48.1	48.0	47.8	47.6	47.2	46.9	46.7	46.6	46.6	46.8	47.0	-46	55.2	55.1	55.0	54.9	54.7	54.6	54.6	54.6	54.7	54.8	54.9	54.9	
Iota Pegasus	3.8	28	08.6	08.7	08.6	08.5	08.3	08.0	07.8	07.6	07.5	07.6	07.7	07.8	25	23.5	23.4	23.3	23.3	23.3	23.3	23.5	23.6	23.7	23.8	23.9	23.9	
Sadal Melik	2.9	28	26.3	26.3	26.3	26.2	26.0	25.7	25.5	25.3	25.2	25.3	25.4	25.4	-0	16.5	16.6	16.6	16.6	16.5	16.4	16.3	16.2	16.2	16.1	16.2	16.2	
Al Dhanab	3.0	31	22.9	22.9	22.9	22.7	22.4	22.2	21.9	21.7	21.6	21.6	21.8	21.9	-37	19.5	19.4	19.3	19.2	19.1	19.0	19.0	19.0	19.0	19.1	19.1	19.2	19.2
Deneb Algiedi	2.9	33	07.0	07.0	06.9	06.7	06.5	06.3	06.0	05.9	05.8	05.8	05.9	06.0	-16	05.2	05.2	05.2	05.1	05.1	05.0	04.9	04.8	04.8	04.9	04.9	04.9	
Enif	2.4	33	50.6	50.6	50.6	50.4	50.2	50.0	49.8	49.6	49.6	49.6	49.7	49.8	9	55.0	55.0	54.9	54.9	55.0	55.0	55.2	55.3	55.4	55.4	55.4	55.4	
Nu Octans	3.7	34	23.6	23.8	23.6	23.1	22.3	21.4	20.7	20.1	20.0	20.3	20.9	21.6	-77	21.2	21.0	20.9	20.7	20.6	20.5	20.5	20.6	20.8	20.9	21.0	21.0	
Nashira	3.7	34	51.2	51.2	51.1	50.9	50.7	50.5	50.3	50.1	50.0	50.1	50.2	50.3	-16	37.4	37.3	37.3	37.3	37.2	37.1	37.0	37.0	37.0	37.0	37.0	37.0	
Rho Cygnus	4.0	36	25.5	25.5	25.5	25.3	25.0	24.7	24.5	24.3	24.3	24.4	24.5	24.7	45	38.1	37.9	37.8	37.7	37.7	37.8	37.9	38.1	38.3	38.4	38.5	38.5	
Sadal Suud	2.9	36	59.6	59.5	59.5	59.3	59.1	58.9	58.6	58.5	58.4	58.5	58.6	58.7	-5	31.9	31.9	31.9	31.9	31.8	31.7	31.7	31.6	31.5	31.5	31.5	31.6	
Alfirk	3.2	37	49.3	49.5	49.5	49.1	48.6	48.1	47.7	47.5	47.5	47.8	48.2	48.6	70	36.2	36.1	35.9	35.8	35.8	35.8	36.0	36.2	36.4	36.5	36.6	36.6	
Zeta Capricornus	3.8	38	12.3	12.3	12.2	12.1	11.8	11.6	11.3	11.2	11.1	11.2	11.3	11.4	-22	22.4	22.4	22.3	22.3	22.2	22.1	22.0	22.0	22.0	22.1	22.1	22.1	
Alderamin	2.5	40	18.7	18.8	18.7	18.5	18.1	17.7	17.4	17.2	17.2	17.4	17.7	18.0	62	37.6	37.5	37.3	37.2	37.2	37.3	37.4	37.6	37.8	37.9	38.0	38.0	
Kitalpha	3.9	40	56.0	56.0	55.9	55.7	55.5	55.3	55.0	54.9	54.9	54.9	55.0	55.1	5	17.1	17.1	17.0	17.0	17.1	17.2	17.3	17.4	17.5	17.5	17.5	17.5	
Tau Cygnus	3.7	41	13.0	13.0	12.9	12.7	12.5	12.2	12.0	11.8	11.8	11.9	12.1	12.2	38	05.2	05.0	04.9	04.8	04.9	04.9	05.1	05.3	05.4	05.5	05.6	05.5	
Zeta Cygnus	3.2	41	40.4	40.4	40.3	40.1	39.9	39.6	39.4	39.3	39.3	39.3	39.5	39.6	30	15.9	15.8	15.7	15.7	15.7	15.8	15.9	16.1	16.2	16.3	16.3	16.3	
Xi Cygnus	3.7	43	41.4	41.4	41.4	41.1	40.9	40.6	40.4	40.2	40.2	40.3	40.5	40.7	43	58.0	57.8	57.7	57.6	57.6	57.7	57.9	58.0	58.2	58.3	58.4	58.3	
Nu Cygnus	3.9	45	37.6	37.7	37.6	37.3	37.1	36.8	36.6	36.5	36.5	36.6	36.8	36.9	41	12.2	12.1	12.0	11.9	11.9	12.0	12.2	12.3	12.5	12.6	12.6	12.6	
Beta Indus	3.7	46	07.5	07.5	07.3	07.0	06.6	06.2	05.9	05.6	05.6	05.8	06.0	06.2	-58	25.4	25.2	25.1	25.0	24.9	24.8	24.9	24.9	25.0	25.1	25.2	25.2	
Albali	3.8	47	57.6	57.6	57.5	57.3	57.1	56.8	56.6	56.5	56.5	56.5	56.7	56.8	-9	27.8	27.8	27.8	27.8	27.7	27.6	27.6	27.5	27.5	27.5	27.5	27.5	
Gienah Cygni	2.5	48	21.6	21.6	21.5	21.3	21.0	20.8	20.6	20.5	20.5	20.6	20.7	20.9	34	00.3	00.2	00.1	00.0	00.1	00.2	00.3	00.5	00.6	00.7	00.7		

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		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Ancha	3.3	57	03.6	03.5	03.4	03.2	03.0	02.7	02.5	02.4	02.5	02.5	02.7	02.8	-0	47.7	47.8	47.8	47.8	47.7	47.6	47.5	47.5	47.4	47.4	47.4	47.4
Delta Pavonis	3.6	57	36.3	36.2	35.8	35.4	34.9	34.4	34.0	33.8	33.8	34.1	34.4	34.7	-66	09.6	09.5	09.4	09.3	09.2	09.2	09.3	09.4	09.5	09.6	09.6	09.6
Epsilon Pavonis	4.0	59	36.2	36.0	35.6	35.0	34.3	33.6	33.2	33.0	33.1	33.4	34.0	34.3	-72	53.3	53.1	53.0	52.9	52.8	52.9	52.9	53.1	53.2	53.3	53.3	53.2
Gamma Sagitta	3.5	60	12.8	12.8	12.6	12.4	12.2	12.0	11.8	11.7	11.7	11.8	12.0	12.1	19	31.0	30.9	30.8	30.8	30.8	30.9	31.1	31.2	31.3	31.4	31.4	31.3
Eta Cygnus	3.9	60	50.6	50.6	50.4	50.2	49.9	49.7	49.5	49.5	49.5	49.7	49.8	50.0	35	06.5	06.3	06.2	06.2	06.2	06.3	06.5	06.6	06.8	06.8	06.9	06.8
Aishain	3.7	61	03.8	03.7	03.6	03.4	03.2	02.9	02.8	02.7	02.7	02.8	02.9	03.0	6	25.7	25.7	25.6	25.6	25.7	25.8	25.9	26.0	26.0	26.0	26.0	26.0
Eta Aquila	3.9	61	46.2	46.1	45.9	45.7	45.5	45.3	45.1	45.0	45.0	45.1	45.3	45.4	1	01.7	01.6	01.6	01.6	01.7	01.8	01.8	01.9	02.0	02.0	02.0	02.0
Altair	0.9	62	11.8	11.7	11.6	11.4	11.1	10.9	10.8	10.7	10.7	10.8	11.0	11.0	8	53.5	53.4	53.4	53.4	53.4	53.5	53.6	53.7	53.8	53.8	53.8	53.8
Tyl	3.8	62	59.0	59.0	58.8	58.3	57.8	57.4	57.1	57.1	57.4	57.8	58.3	58.8	70	17.5	17.3	17.2	17.1	17.1	17.2	17.4	17.6	17.8	17.9	17.9	17.8
Kaus Media	3.8	63	03.4	03.3	03.1	02.9	02.7	02.5	02.3	02.2	02.3	02.4	02.5	02.6	18	33.4	33.3	33.2	33.2	33.2	33.3	33.5	33.6	33.7	33.7	33.7	33.7
Tarazed	2.7	63	19.8	19.8	19.6	19.4	19.2	19.0	18.8	18.7	18.8	18.9	19.0	19.1	10	38.1	38.0	38.0	37.9	38.0	38.1	38.2	38.3	38.4	38.4	38.4	38.4
Delta Cygnus	2.9	63	41.5	41.5	41.3	41.1	40.8	40.5	40.4	40.3	40.4	40.6	40.8	41.0	45	09.2	09.0	08.9	08.9	08.9	09.0	09.2	09.4	09.5	09.6	09.6	09.5
Albireo	3.1	67	14.0	13.9	13.7	13.5	13.3	13.0	12.9	12.8	12.9	13.0	13.2	13.3	27	58.7	58.6	58.5	58.5	58.5	58.6	58.8	58.9	59.0	59.1	59.1	59.0
Iota Cygnus	3.8	67	31.5	31.4	31.2	30.9	30.6	30.4	30.2	30.2	30.3	30.6	30.8	31.0	51	44.9	44.8	44.7	44.6	44.6	44.8	44.9	45.1	45.3	45.3	45.3	45.3
Delta Aquila	3.4	68	30.9	30.8	30.6	30.4	30.2	29.9	29.8	29.7	29.8	29.9	30.0	30.1	3	07.9	07.9	07.8	07.8	07.9	08.0	08.0	08.1	08.2	08.2	08.2	08.2
Rukbat	4.0	68	52.5	52.4	52.2	51.9	51.6	51.3	51.1	51.0	51.1	51.2	51.4	51.5	-40	36.0	35.9	35.9	35.8	35.8	35.8	35.8	35.9	35.9	35.9	35.9	35.9
Arkab	4.0	69	10.9	10.8	10.5	10.2	09.9	09.6	09.4	09.3	09.4	09.5	09.7	09.8	-44	26.6	26.5	26.4	26.4	26.4	26.4	26.4	26.4	26.5	26.5	26.5	26.5
Rho Sagittarius	3.9	69	27.2	27.1	26.9	26.7	26.4	26.2	26.0	26.0	26.0	26.1	26.3	26.3	-17	49.9	49.9	49.9	49.8	49.8	49.7	49.7	49.7	49.7	49.7	49.7	49.7
Kappa Cygnus	3.8	70	40.9	40.8	40.6	40.3	40.0	39.7	39.5	39.5	39.7	39.9	40.2	40.4	53	23.1	22.9	22.8	22.8	22.8	22.9	23.1	23.3	23.4	23.5	23.5	23.4
Nodus Secundus	3.1	71	52.6	52.6	52.3	51.8	51.4	51.0	50.9	50.9	51.2	51.6	52.1	52.4	67	40.6	40.4	40.3	40.3	40.3	40.4	40.6	40.8	40.9	41.0	41.0	40.9
Albaldah	2.9	72	25.6	25.5	25.3	25.1	24.8	24.6	24.5	24.4	24.4	24.5	24.7	24.7	-21	00.6	00.6	00.6	00.6	00.5	00.5	00.5	00.5	00.5	00.5	00.5	00.5
Tau Sagittarius	3.3	73	07.6	07.5	07.3	07.0	06.7	06.5	06.4	06.3	06.3	06.5	06.6	06.7	-27	39.5	39.5	39.4	39.4	39.4	39.4	39.3	39.4	39.4	39.4	39.4	39.4
Al Thalimain	3.4	73	19.2	19.1	18.9	18.7	18.5	18.3	18.1	18.1	18.1	18.2	18.4	18.4	-4	52.2	52.2	52.3	52.3	52.2	52.1	52.1	52.0	52.0	52.0	52.0	52.0
Deneb el Okab	3.0	73	32.8	32.7	32.5	32.3	32.1	31.9	31.8	31.7	31.8	31.9	32.0	32.1	13	52.6	52.5	52.4	52.4	52.4	52.5	52.7	52.8	52.8	52.9	52.9	52.8
Omicron Sagittarius	3.8	73	41.8	41.7	41.5	41.2	41.0	40.7	40.6	40.5	40.6	40.7	40.8	40.9	-21	43.8	43.8	43.7	43.7	43.7	43.6	43.6	43.6	43.6	43.6	43.6	43.6
Ascella	2.6	74	12.4	12.2	12.0	11.8	11.5	11.3	11.1	11.0	11.1	11.2	11.3	11.4	-29	52.1	52.1	52.0	52.0	52.0	52.0	51.9	52.0	52.0	52.0	52.0	52.0
Sulafat	3.3	75	11.1	11.0	10.8	10.5	10.3	10.1	10.0	09.9	10.0	10.2	10.4	10.5	32	42.1	41.9	41.8	41.8	41.9	42.0	42.1	42.3	42.4	42.4	42.4	42.3
Xi Sagittarius	3.5	75	26.1	26.0	25.8	25.5	25.3	25.1	24.9	24.9	24.9	25.0	25.2	25.2	-21	05.7	05.7	05.7	05.7	05.7	05.6	05.6	05.6	05.6	05.6	05.6	05.6
Nunki	2.1	76	02.8	02.6	02.4	02.2	01.9	01.7	01.5	01.5	01.5	01.7	01.8	01.9	-26	17.2	17.2	17.2	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1
Sheliak	3.5	77	24.1	24.0	23.8	23.5	23.3	23.1	23.0	23.0	23.1	23.2	23.4	23.5	33	22.3	22.2	22.1	22.1	22.1	22.3	22.4	22.6	22.7	22.7	22.7	22.6
Phi Sagittarius	3.2	78	26.9	26.7	26.5	26.2	26.0	25.7	25.6	25.5	25.6	25.7	25.9	25.9	-26	59.0	58.9	58.9	58.9	58.9	58.8	58.8	58.8	58.9	58.9	58.9	58.9
Vega	0.0	80	41.7	41.5	41.3	41.1	40.8	40.6	40.5	40.5	40.7	40.8	41.0	41.1	38	47.4	47.3	47.2	47.2	47.2	47.4	47.5	47.7	47.8	47.8	47.8	47.7
Alpha Scutum	3.9	81	04.7	04.5	04.3	04.1	03.9	03.7	03.6	03.5	03.6	03.7	03.8	03.9	-8	14.3	14.4	14.4	14.4	14.3	14.3	14.2	14.2	14.2	14.2	14.2	14.2
Kaus Borealis	2.8	82	52.2	52.1	51.9	51.6	51.3	51.1	51.0	51.0	51.0	51.2	51.3	51.3	-25	25.1	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Alpha Telescopium	3.5	83	05.6	05.4	05.1	04.8	04.4	04.2	04.0	04.0	04.1	04.3	04.4	04.5	-45	57.8	57.8	57.7	57.7	57.7	57.7	57.8	57.9	57.9	57.9	57.9	57.8
Kaus Australis	1.8	83	48.6	48.4	48.2	47.9	47.6	47.4	47.3	47.2	47.3	47.4	47.6	47.6	-34	22.9	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.9	22.9	22.9	22.8
109 Hercules	3.9	83	59.0	58.8	58.6	58.4	58.2	58.0	57.9	57.9	58.0	58.1	58.3	58.3	21	46.3	46.2	46.1	46.1	46.2	46.3	46.4	46.6	46.6	46.7	46.6	46.5
Eta Serpens	3.3	84	33.5	33.3	33.2	32.9	32.7	32.5	32.4	32.4	32.5	32.6	32.7	32.7	-2	53.9	53.9	54.0	54.0	53.9	53.8	53.8	53.7	53.7	53.7	53.7	53.7
Chi Draco	3.6	84	47.9	47.7	47.2	46.6	46.1	45.8	45.7	46.0	46.4	47.0	47.6	48.0	72	44.1	43.9	43.8	43.8	43.8	44.0	44.2	44.3	44.4	44.5	44.4	44.3
Kaus Media	2.7	84	36.6	36.4	36.2	35.9	35.6	35.4	35.3	35.3	35.3	35.5	35.6	35.7	-29	49.5	49.5	49.5	49.5	49.4	49.4	49.4	49.5	49.5	49.5	49.5	49.5
Eta Sagittarius	3.1	85	26.6	26.4	26.2	25.9	25.6	25.4	25.2	25.2	25.3	25.4	25.6	25.6	-36	45.6	45.5	45.5	45.5	45.5	45.5	45.5	45.6	45.6	45.6	45.6	45.6
Mu Sagittarius	3.8	86	25.6	25.4	25.2	25.0	24.7	24.5	24.4	24.4	24.4	24.6	24.7	24.7	-21	03.4	03.5	03.5	03.4	03.4	03.4	03.4	03.4	03.4	03.4	03.4	03.4
Omicron Hercules	3.8	88	01.8	01.7	01.5	01.2	01.0	00.8	00.8	00.8	00.9	01.0	01.2	01.3	28	45.7	45.6	45.5	45.5	45.6	45.7	45.8	46.0	46.0	46.1	46.0	45.9
Omicron Ophiuchus	3.7	88	03.5	03.4	03.2	02.9	02.7	02.5	02.4	02.4	02.5	02.7	02.8	02.8	9	33.8	33.7	33.7	33.7	33.7	33.8	33.9	34.0	34.0	34.1	34.0	34.0
Theta Ara	3.7	88	10.2	10.0	09.7	09.3	09.0	08.7	08.6	08.6	08.7	08.9	09.1	09.1	-50	05.5	05.4	05.4	05.3	05.4	05.4	05.5	05.6	05.6	05.6	05.6	05.5
El Nasl	3.6	88	24.3	24.2	23.9	23.6	23.4	23.2	23.1	23.0	23.1	23.3	23.4	23.4	-30	25.5	25.5	25.5	25.4	25.4	25.4	25.5	25.5	25.5	25.5	25.5	25.5
Nu Ophiuchus	3.3	90	07.3	07.1	06.9	06.7	06.5	06.3	06.2	06.2	06.2	06.4	06.5	06.5	-9	46.6	46.6	46.6	46.6	46.6	46.5	46.5	46.5	46.5	46.5	46.5	46.5
Xi Hercules	3.7	90	28.5	28.4	28.1	27.9	27.7	27.5	27.4	27.5	27.6	27.7	27.9	28.0	29	14.7	14.6	14.5	14.5	14.6	14.7	14.8	14.9	15.0	15.0	15.0	

Name	Mag	Sidereal Hour Angle												Declination														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Sargas	1.9	95	30.7	30.4	30.2	29.8	29.5	29.3	29.2	29.2	29.3	29.5	29.7	29.7	-43	00.2	00.2	00.2	00.2	00.2	00.2	00.2	00.3	00.4	00.4	00.4	00.3	00.3
Ras Alhague	2.1	96	09.9	09.7	09.5	09.2	09.0	08.9	08.8	08.8	08.9	09.1	09.2	09.2	12	33.1	33.0	32.9	32.9	33.0	33.1	33.2	33.3	33.3	33.3	33.3	33.3	33.2
Shaula	1.6	96	26.8	26.6	26.3	26.0	25.8	25.6	25.5	25.5	25.6	25.8	25.9	25.9	-37	06.6	06.6	06.6	06.6	06.6	06.7	06.7	06.7	06.7	06.8	06.8	06.7	06.7
Choo	2.9	96	52.1	51.9	51.5	51.2	50.9	50.6	50.5	50.5	50.7	50.9	51.0	51.1	-49	53.0	52.9	52.9	52.9	53.0	53.0	53.1	53.2	53.2	53.2	53.1	53.1	53.1
Delta Ara	3.6	97	01.6	01.3	00.9	00.4	00.0	59.7	59.6	59.6	59.8	00.1	00.3	00.4	-60	41.4	41.4	41.3	41.3	41.4	41.5	41.6	41.7	41.7	41.7	41.7	41.6	41.6
Lesath	2.7	97	09.5	09.3	09.0	08.7	08.4	08.2	08.1	08.1	08.3	08.4	08.5	08.5	-37	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3	18.3	18.3	18.3	18.2
Rastaban	2.8	97	20.9	20.7	20.4	20.1	19.8	19.7	19.6	19.8	20.0	20.2	20.5	20.6	52	17.5	17.3	17.3	17.3	17.4	17.5	17.7	17.8	17.8	17.9	17.9	17.8	17.7
Gamma Ara	3.3	98	28.0	27.7	27.3	26.9	26.5	26.2	26.1	26.2	26.3	26.6	26.8	26.8	-56	23.1	23.1	23.0	23.1	23.1	23.2	23.3	23.4	23.4	23.4	23.3	23.3	23.2
Beta Ara	2.8	98	29.5	29.2	28.8	28.4	28.1	27.8	27.7	27.7	27.9	28.2	28.3	28.4	-55	32.3	32.2	32.2	32.2	32.3	32.3	32.4	32.5	32.5	32.6	32.6	32.5	32.4
Theta Ophiuchus	3.3	99	21.7	21.5	21.2	21.0	20.7	20.6	20.5	20.5	20.6	20.7	20.8	20.8	-25	00.6	00.6	00.6	00.6	00.6	00.6	00.6	00.6	00.6	00.6	00.6	00.6	00.6
Pi Hercules	3.1	101	09.8	09.6	09.4	09.1	08.9	08.8	08.8	08.8	09.0	09.2	09.3	09.4	36	47.8	47.6	47.5	47.6	47.6	47.8	47.9	48.1	48.1	48.1	48.0	47.9	47.9
Sarin	3.1	101	09.2	09.0	08.7	08.5	08.3	08.2	08.1	08.2	08.3	08.5	08.6	08.6	24	49.6	49.4	49.4	49.4	49.4	49.6	49.7	49.8	49.8	49.8	49.8	49.8	49.7
Ras Algethi	2.7	101	14.3	14.1	13.9	13.6	13.4	13.3	13.3	13.3	13.4	13.5	13.6	13.6	14	22.7	22.6	22.5	22.5	22.6	22.7	22.8	22.9	22.9	22.9	22.8	22.8	22.8
Eta Scorpius	3.3	101	48.2	47.9	47.6	47.3	47.0	46.8	46.7	46.8	46.9	47.1	47.2	47.2	-43	15.1	15.0	15.0	15.0	15.1	15.1	15.2	15.3	15.3	15.3	15.2	15.1	15.1
Sabik	2.4	102	16.7	16.5	16.2	16.0	15.8	15.6	15.6	15.6	15.7	15.8	15.9	15.9	-15	44.2	44.3	44.3	44.3	44.3	44.3	44.3	44.2	44.2	44.2	44.2	44.2	44.2
Aldhibah	3.2	102	48.5	48.2	47.8	47.4	47.1	46.9	47.0	47.2	47.6	48.0	48.4	48.5	65	42.0	41.8	41.7	41.8	41.9	42.0	42.2	42.3	42.4	42.4	42.3	42.1	42.1
Epsilon Hercules	3.9	104	50.7	50.5	50.3	50.0	49.8	49.7	49.7	49.7	49.9	50.0	50.2	50.2	30	54.6	54.5	54.4	54.4	54.5	54.6	54.8	54.9	54.9	54.9	54.8	54.7	54.7
Zeta Ara	3.1	105	09.7	09.4	09.0	08.6	08.3	08.1	08.0	08.0	08.2	08.5	08.6	08.6	-56	00.2	00.2	00.2	00.2	00.3	00.4	00.4	00.5	00.5	00.6	00.5	00.5	00.3
Kappa Ophiuchus	3.2	105	28.7	28.5	28.3	28.1	27.9	27.7	27.7	27.7	27.8	28.0	28.1	28.1	9	21.5	21.4	21.4	21.4	21.4	21.5	21.6	21.7	21.7	21.7	21.7	21.6	21.6
Zeta Scorpius	3.6	106	11.9	11.6	11.3	11.0	10.7	10.6	10.5	10.5	10.7	10.8	10.9	10.9	-42	22.6	22.6	22.6	22.6	22.7	22.7	22.8	22.8	22.8	22.8	22.8	22.8	22.7
Mu2 Scorpius	3.6	106	45.9	45.7	45.4	45.1	44.9	44.7	44.6	44.7	44.8	44.9	45.0	45.0	-38	02.0	02.0	02.0	02.0	02.1	02.1	02.1	02.2	02.2	02.2	02.1	02.1	02.1
Mu1 Scorpius	3.0	106	52.9	52.7	52.4	52.1	51.8	51.7	51.6	51.6	51.8	51.9	52.0	52.0	-38	03.8	03.8	03.8	03.8	03.8	03.9	03.9	04.0	04.0	04.0	03.9	03.9	03.9
Epsilon Scorpius	2.3	107	18.9	18.7	18.4	18.1	17.9	17.7	17.7	17.7	17.8	18.0	18.1	18.0	-34	18.6	18.6	18.6	18.6	18.7	18.7	18.7	18.8	18.8	18.8	18.7	18.7	18.7
Eta Ara	3.8	107	21.8	21.4	21.0	20.6	20.2	20.0	19.9	20.0	20.2	20.5	20.6	20.6	-59	03.4	03.3	03.3	03.4	03.4	03.6	03.7	03.7	03.8	03.8	03.7	03.6	03.5
Atria	1.9	107	36.1	35.6	35.0	34.4	34.0	33.7	33.6	33.7	34.1	34.4	34.7	34.7	-69	02.6	02.5	02.5	02.5	02.6	02.7	02.9	03.0	03.0	03.0	02.9	02.7	02.7
Eta Hercules	3.5	109	12.2	11.9	11.7	11.4	11.2	11.1	11.1	11.2	11.4	11.6	11.7	11.7	38	54.1	53.9	53.9	53.9	54.0	54.2	54.3	54.4	54.4	54.4	54.3	54.2	54.2
Zeta Hercules	2.9	109	35.8	35.6	35.3	35.1	34.9	34.8	34.8	34.9	35.0	35.2	35.3	35.3	31	35.0	34.8	34.8	34.8	34.9	35.0	35.2	35.3	35.3	35.3	35.2	35.1	35.1
Zeta Ophiuchus	2.6	110	35.3	35.0	34.8	34.6	34.4	34.3	34.2	34.3	34.4	34.5	34.6	34.5	-10	35.2	35.3	35.3	35.3	35.3	35.3	35.2	35.2	35.2	35.2	35.2	35.2	35.2
Tau Scorpius	2.8	110	53.4	53.2	52.9	52.7	52.5	52.3	52.3	52.3	52.4	52.6	52.6	52.6	-28	14.1	14.1	14.2	14.2	14.2	14.2	14.3	14.3	14.3	14.2	14.2	14.2	14.2
Gamma Apus	3.9	111	18.2	17.3	16.3	15.2	14.4	13.9	13.9	14.3	15.0	15.7	16.2	16.2	-78	54.9	54.8	54.8	54.9	55.0	55.1	55.3	55.4	55.4	55.4	55.3	55.1	55.1
Marfik	3.9	112	09.6	09.4	09.1	08.9	08.7	08.6	08.6	08.6	08.7	08.9	08.9	08.9	1	57.7	57.6	57.6	57.6	57.6	57.7	57.8	57.8	57.8	57.8	57.8	57.7	57.7
Kornephoros	2.8	112	21.0	20.8	20.6	20.3	20.2	20.1	20.1	20.1	20.2	20.4	20.5	20.5	21	28.0	27.9	27.8	27.9	27.9	28.0	28.1	28.2	28.3	28.2	28.2	28.1	28.1
Antares	1.1	112	30.7	30.4	30.2	29.9	29.7	29.6	29.6	29.6	29.7	29.8	29.9	29.9	-26	27.1	27.1	27.2	27.2	27.2	27.3	27.3	27.3	27.3	27.3	27.2	27.2	27.2
Eta Draco	2.7	113	58.8	58.4	58.1	57.7	57.5	57.4	57.5	57.7	58.0	58.4	58.6	58.7	61	29.3	29.2	29.1	29.2	29.3	29.5	29.6	29.7	29.8	29.7	29.6	29.4	29.4
Gamma Hercules	3.7	114	25.3	25.1	24.9	24.7	24.5	24.4	24.4	24.5	24.6	24.7	24.8	24.8	19	07.7	07.6	07.6	07.6	07.7	07.8	07.9	07.9	08.0	07.9	07.9	07.8	07.8
Alniyat	2.9	114	34.0	33.8	33.5	33.3	33.1	33.0	32.9	33.0	33.1	33.2	33.3	33.2	-25	36.9	36.9	37.0	37.0	37.0	37.0	37.1	37.1	37.1	37.0	37.0	37.0	37.0
Tau Hercules	3.9	115	00.1	59.8	59.5	59.3	59.1	59.0	59.0	59.2	59.4	59.6	59.7	59.8	46	17.3	17.1	17.1	17.1	17.2	17.4	17.5	17.6	17.6	17.6	17.5	17.3	17.3
Yed Posterior	3.2	115	18.1	17.9	17.6	17.4	17.3	17.1	17.1	17.2	17.3	17.4	17.5	17.4	-4	43.0	43.0	43.1	43.1	43.1	43.0	43.0	43.0	43.0	42.9	42.9	43.0	43.0
Atria	3.9	115	56.4	55.9	55.5	55.0	54.6	54.4	54.4	54.5	54.8	55.1	55.3	55.2	-63	42.4	42.4	42.4	42.5	42.6	42.7	42.8	42.9	42.9	42.9	42.7	42.6	42.6
Yed Prior	2.7	116	17.8	17.6	17.4	17.1	17.0	16.9	16.8	16.9	17.0	17.1	17.2	17.1	-3	43.2	43.2	43.3	43.3	43.3	43.2	43.2	43.1	43.1	43.1	43.1	43.2	43.2
Graffias	2.6	118	30.6	30.4	30.2	29.9	29.7	29.6	29.6	29.7	29.8	29.9	29.9	29.9	-19	49.8	49.9	49.9	50.0	50.0	50.0	50.0	50.0	50.0	50.0	49.9	49.9	49.9
Dschubba	2.3	119	47.1	46.8	46.6	46.3	46.1	46.0	46.0	46.1	46.2	46.3	46.4	46.3	-22	38.9	38.9	39.0	39.0	39.0	39.1	39.1	39.1	39.0	39.0	39.0	39.0	39.0
Eta Lupus	3.4	119	49.3	49.0	48.7	48.4	48.2	48.1	48.1	48.2	48.3	48.4	48.5	48.4	-38	25.3	25.3	25.4	25.4	25.5	25.6	25.6	25.6	25.6	25.6	25.5	25.5	25.5
Pi Scorpius	2.9	120	09.1	08.8	08.6	08.3	08.2	08.1	08.0	08.1	08.2	08.3	08.4	08.3	-26	08.4	08.5	08.5	08.6	08.6	08.6	08.6	08.6	08.6	08.6	08.6	08.5	08.5
Gamma Serpens	3.9	120	47.0	46.8	46.6	46.4	46.2	46.1	46.1	46.2	46.3	46.4	46.5	46.5	15	37.8	37.6	37.6	37.6	37.7	37.8	37.8	37.9	37.9	37.9	37.8	37.7	37.7
Beta Triang' Aust'	2.8	121	01.2	00.7	00.2	59.8	59.5	59.3	59.3	59.5	59.7	00.0	00.1	00.0	-63	27.4	27.4	27.4	27.5	27.6	27.7	27.8	27.9	27.9	27.9	27.7	27.6	27.6
Epsilon Serpens	3.7	122	11.1	10.8	1																							

Name	Mag	Sidereal Hour Angle												Declination													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Phi Lupus	3.6	129	24.4	24.1	23.8	23.5	23.4	23.3	23.3	23.4	23.5	23.6	23.7	23.6	-36	17.6	17.6	17.7	17.8	17.9	17.9	18.0	18.0	18.0	17.9	17.8	17.8
Delta Lupus	3.2	129	30.6	30.3	30.0	29.7	29.6	29.5	29.5	29.6	29.7	29.8	29.9	29.8	-40	40.7	40.8	40.8	40.9	41.0	41.1	41.1	41.2	41.2	41.1	41.0	41.0
Pherkad	3.0	129	49.7	49.2	48.7	48.2	48.0	48.1	48.4	48.8	49.4	49.8	50.1	50.1	71	47.7	47.6	47.6	47.7	47.9	48.0	48.1	48.2	48.2	48.1	47.9	47.7
Gamma Triang' Aust'	2.9	130	04.0	03.4	02.8	02.3	02.0	01.9	02.0	02.2	02.6	02.9	03.0	02.8	-68	42.6	42.6	42.7	42.8	42.9	43.1	43.2	43.2	43.2	43.1	43.0	42.9
Zuben Elschemali	2.6	130	37.6	37.4	37.2	37.0	36.8	36.8	36.8	36.8	36.9	37.0	37.1	37.0	-9	25.0	25.1	25.2	25.2	25.2	25.2	25.2	25.2	25.1	25.1	25.1	25.2
Delta Bootes	3.5	131	02.1	01.8	01.6	01.4	01.2	01.2	01.2	01.4	01.5	01.6	01.7	01.6	33	16.6	16.5	16.5	16.5	16.6	16.7	16.8	16.9	16.9	16.8	16.7	16.6
Zeta Lupus	3.4	131	46.1	45.7	45.4	45.1	44.9	44.8	44.8	44.9	45.1	45.3	45.3	45.2	-52	07.9	07.9	08.0	08.1	08.2	08.3	08.4	08.4	08.4	08.3	08.2	08.1
Kappa Lupus	3.9	131	51.6	51.3	51.0	50.7	50.5	50.4	50.4	50.6	50.7	50.9	50.9	50.8	-48	46.2	46.3	46.3	46.4	46.5	46.6	46.7	46.7	46.7	46.6	46.5	46.5
Brachium	3.3	133	51.0	50.8	50.5	50.3	50.2	50.1	50.1	50.2	50.3	50.4	50.4	50.3	-25	19.0	19.1	19.2	19.2	19.3	19.3	19.3	19.3	19.3	19.3	19.2	19.2
Nekkar	3.5	134	25.8	25.5	25.2	25.0	24.9	24.9	25.0	25.1	25.3	25.4	25.5	25.4	40	21.0	20.9	20.9	20.9	21.0	21.2	21.3	21.3	21.3	21.2	21.1	20.9
Ke Kwan	3.1	135	03.8	03.5	03.2	02.9	02.8	02.7	02.8	02.9	03.0	03.1	03.1	03.0	-42	08.3	08.4	08.5	08.6	08.7	08.7	08.8	08.8	08.8	08.7	08.6	08.6
Beta Lupus	2.7	135	13.2	12.9	12.6	12.3	12.2	12.1	12.1	12.2	12.4	12.5	12.5	12.4	-43	10.1	10.2	10.3	10.4	10.5	10.5	10.6	10.6	10.6	10.5	10.4	10.4
Zuben El Genubi	2.8	137	09.3	09.1	08.8	08.6	08.5	08.5	08.5	08.6	08.7	08.8	08.8	08.6	-16	04.8	04.9	04.9	05.0	05.0	05.0	05.0	05.0	05.0	05.0	04.9	05.0
Kochab	2.1	137	20.1	19.5	18.9	18.5	18.3	18.4	18.9	19.4	20.0	20.5	20.7	20.7	74	06.7	06.6	06.6	06.7	06.9	07.0	07.2	07.2	07.1	07.0	06.8	06.6
Alpha Apus	3.8	137	45.5	44.5	43.5	42.7	42.2	42.2	42.5	43.1	43.9	44.4	44.6	44.2	-79	04.8	04.8	04.8	05.0	05.1	05.3	05.4	05.5	05.5	05.4	05.2	05.1
109 Virgo	3.7	138	19.4	19.2	18.9	18.8	18.7	18.6	18.6	18.7	18.8	18.9	18.9	18.8	1	51.2	51.1	51.0	51.0	51.0	51.1	51.1	51.1	51.2	51.1	51.1	51.0
Mirak	2.4	138	39.3	39.0	38.8	38.6	38.5	38.5	38.6	38.7	38.8	38.9	38.9	38.8	27	01.9	01.8	01.8	01.8	01.9	02.0	02.1	02.1	02.1	02.1	02.0	01.8
Rijl al Awwa	3.9	139	06.9	06.7	06.5	06.3	06.2	06.1	06.2	06.2	06.3	06.4	06.4	06.3	-5	41.9	42.0	42.1	42.1	42.1	42.2	42.1	42.0	42.0	42.0	42.0	42.1
Alpha Circinus	3.2	139	11.6	11.1	10.6	10.2	10.0	10.0	10.1	10.3	10.6	10.8	10.9	10.6	-65	00.7	00.7	00.8	00.9	01.1	01.2	01.3	01.4	01.3	01.2	01.1	01.0
Men	2.3	139	22.1	21.7	21.4	21.2	21.0	21.0	21.0	21.2	21.3	21.4	21.4	21.3	-47	25.5	25.6	25.6	25.8	25.9	26.0	26.0	26.0	26.0	25.9	25.8	25.8
Zeta Bootes	3.8	139	36.3	36.0	35.8	35.6	35.5	35.5	35.6	35.6	35.7	35.8	35.8	35.7	13	41.2	41.1	41.0	41.0	41.1	41.2	41.2	41.3	41.3	41.3	41.2	41.1
Rigel Kentaurus	0.0	139	56.8	56.3	55.9	55.6	55.4	55.4	55.5	55.8	56.0	56.2	56.2	56.0	-60	52.1	52.2	52.3	52.4	52.6	52.7	52.8	52.8	52.7	52.6	52.5	52.4
Eta Centaurus	2.3	140	58.8	58.5	58.2	58.0	57.8	57.8	57.8	57.9	58.1	58.2	58.2	58.0	-42	11.8	11.8	11.9	12.0	12.1	12.2	12.2	12.2	12.2	12.2	12.1	12.0
Seginus	3.0	141	53.4	53.1	52.9	52.7	52.6	52.6	52.7	52.8	53.0	53.1	53.1	53.0	38	15.8	15.7	15.7	15.8	15.9	16.0	16.1	16.1	16.1	16.0	15.9	15.7
Rho Bootes	3.6	141	56.7	56.4	56.2	56.0	55.9	55.9	56.0	56.1	56.2	56.3	56.4	56.3	30	19.6	19.5	19.5	19.6	19.7	19.8	19.9	19.9	19.9	19.9	19.8	19.7
Lambda Bootes	3.6	145	00.3	59.9	59.6	59.4	59.3	59.3	59.3	59.5	59.6	59.7	59.7	59.5	-46	05.9	05.9	06.0	06.2	06.3	06.4	06.4	06.4	06.4	06.3	06.2	06.1
Arcturus	0.2	145	58.9	58.6	58.4	58.2	58.1	58.1	58.2	58.3	58.4	58.5	58.5	58.4	19	07.9	07.8	07.8	07.8	07.8	07.9	08.0	08.0	08.0	08.0	07.9	07.7
Menkent	2.1	148	11.8	11.4	11.2	11.0	10.9	10.9	11.0	11.1	11.2	11.3	11.2	11.1	-36	24.8	24.9	25.0	25.1	25.2	25.2	25.3	25.3	25.2	25.1	25.1	25.0
Pi Hydra	3.3	148	16.7	16.4	16.2	16.0	15.9	15.9	15.9	16.0	16.1	16.2	16.1	16.0	-26	43.5	43.6	43.7	43.8	43.9	43.9	43.9	43.9	43.8	43.8	43.8	43.8
Thuban	3.7	148	50.5	50.1	49.7	49.4	49.4	49.5	49.8	50.1	50.4	50.6	50.7	50.5	64	19.6	19.5	19.5	19.6	19.8	19.9	20.0	20.0	19.9	19.8	19.6	19.4
Agena	0.6	148	53.1	52.7	52.3	52.0	51.9	51.9	52.0	52.2	52.5	52.6	52.6	52.3	-60	24.8	24.9	25.0	25.1	25.3	25.4	25.5	25.5	25.4	25.3	25.2	25.1
Zeta Centaurus	2.5	150	58.4	58.1	57.8	57.6	57.5	57.5	57.6	57.7	57.9	58.0	57.9	57.7	-47	19.8	19.9	20.0	20.2	20.3	20.4	20.4	20.4	20.4	20.3	20.2	20.1
Muphrid	2.7	151	13.2	12.9	12.7	12.6	12.5	12.5	12.6	12.7	12.8	12.8	12.8	12.7	18	20.9	20.8	20.8	20.8	20.9	21.0	21.0	21.0	21.0	20.9	20.9	20.8
Mu Centaurus	3.5	152	27.5	27.2	27.0	26.8	26.7	26.7	26.8	26.9	27.0	27.1	27.0	26.8	-42	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.5	31.5	31.4	31.3	31.3
Nu Centaurus	3.4	152	29.3	28.9	28.7	28.5	28.4	28.4	28.5	28.6	28.7	28.8	28.8	28.6	-41	43.9	43.9	44.1	44.2	44.3	44.4	44.4	44.4	44.3	44.2	44.2	44.1
Alkaid	1.9	153	01.5	01.2	00.9	00.7	00.7	00.7	00.9	01.1	01.2	01.3	01.3	01.2	49	15.7	15.7	15.7	15.8	15.9	16.0	16.1	16.1	16.0	15.9	15.8	15.6
Epsilon Centaurus	2.3	154	53.1	52.7	52.4	52.2	52.1	52.1	52.2	52.4	52.6	52.7	52.6	52.4	-53	30.6	30.7	30.8	30.9	31.1	31.2	31.2	31.2	31.2	31.1	31.0	30.9
Heze	3.4	156	12.6	12.3	12.1	12.0	12.0	12.0	12.0	12.1	12.2	12.2	12.2	12.0	-0	38.6	38.7	38.8	38.8	38.8	38.8	38.7	38.7	38.7	38.7	38.8	38.8
d Centaurus	3.9	157	06.4	06.1	05.9	05.7	05.6	05.6	05.7	05.8	06.0	06.0	05.9	05.7	-39	27.1	27.2	27.3	27.5	27.6	27.6	27.7	27.6	27.6	27.5	27.4	27.4
Spica	1.1	158	34.9	34.6	34.4	34.3	34.2	34.2	34.3	34.4	34.4	34.5	34.4	34.3	-11	12.6	12.7	12.7	12.8	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.8
Mizar	2.2	158	55.5	55.2	54.9	54.7	54.7	54.8	55.0	55.2	55.4	55.5	55.5	55.3	54	52.3	52.2	52.3	52.4	52.5	52.7	52.7	52.7	52.6	52.5	52.3	52.1
Iota Centaurus	2.8	159	43.3	43.0	42.8	42.7	42.6	42.6	42.7	42.8	42.9	43.0	42.9	42.7	-36	45.5	45.6	45.7	45.8	45.9	46.0	46.0	46.0	45.9	45.9	45.8	45.8
Gamma Hydra	3.0	160	08.7	08.4	08.2	08.1	08.0	08.1	08.1	08.2	08.3	08.3	08.3	08.1	-23	13.1	13.2	13.3	13.4	13							

Name	Mag	Sidereal Hour Angle												Declination													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Epsilon Crux	3.6	174	32.1	31.7	31.5	31.3	31.4	31.5	31.8	32.0	32.1	32.1	32.0	31.6	-60	26.9	27.0	27.1	27.3	27.5	27.6	27.6	27.5	27.4	27.3	27.2	27.2
Zaniah	3.9	174	54.3	54.0	53.9	53.8	53.8	53.8	53.9	54.0	54.0	54.0	53.9	53.7	-0	43.1	43.2	43.3	43.3	43.3	43.3	43.3	43.2	43.2	43.2	43.3	43.4
Gienah Ghurab	2.6	175	55.7	55.5	55.3	55.3	55.3	55.3	55.4	55.5	55.5	55.5	55.4	55.2	-17	35.5	35.6	35.7	35.8	35.9	35.9	35.9	35.8	35.8	35.7	35.7	35.8
Megrez	3.3	176	01.6	01.2	01.0	00.9	00.9	01.1	01.3	01.5	01.7	01.7	01.5	01.2	56	58.6	58.6	58.6	58.7	58.9	59.0	59.0	58.9	58.8	58.6	58.5	58.3
Delta Crux	2.8	176	05.4	05.1	04.8	04.7	04.8	04.9	05.1	05.3	05.5	05.5	05.3	04.9	-58	47.8	47.9	48.0	48.2	48.4	48.5	48.5	48.4	48.3	48.2	48.1	48.0
Minkar	3.0	177	20.9	20.7	20.5	20.5	20.5	20.5	20.6	20.7	20.7	20.7	20.6	20.4	-22	40.2	40.3	40.4	40.5	40.6	40.6	40.6	40.5	40.5	40.4	40.4	40.4
Delta Centaurus	2.6	177	47.4	47.1	46.9	46.8	46.8	47.0	47.1	47.3	47.4	47.3	47.2	46.9	-50	46.2	46.3	46.5	46.7	46.8	46.9	46.9	46.8	46.7	46.6	46.5	46.5
Phad	2.4	181	25.0	24.7	24.5	24.4	24.5	24.7	24.9	25.0	25.1	25.1	24.9	24.6	53	38.3	38.3	38.4	38.5	38.6	38.7	38.7	38.6	38.5	38.4	38.2	38.0
Zavijava	3.6	182	12.3	12.0	11.9	11.8	11.8	11.9	12.0	12.0	12.1	12.0	11.9	11.7	1	42.7	42.6	42.6	42.5	42.5	42.6	42.6	42.6	42.6	42.6	42.6	42.5
Denebola	2.1	182	36.9	36.7	36.5	36.5	36.5	36.6	36.7	36.7	36.8	36.7	36.6	36.4	14	31.1	31.0	31.0	31.0	31.1	31.1	31.1	31.2	31.1	31.1	31.0	30.9
Chi Ursae Major	3.7	183	21.7	21.4	21.2	21.2	21.3	21.4	21.6	21.7	21.7	21.7	21.5	21.3	47	43.4	43.4	43.5	43.6	43.7	43.8	43.8	43.7	43.6	43.5	43.3	43.2
Lambda Musca	3.6	183	29.3	28.8	28.6	28.5	28.7	28.9	29.2	29.5	29.7	29.7	29.4	28.9	-66	46.5	46.7	46.8	47.0	47.2	47.3	47.3	47.2	47.1	46.9	46.8	46.8
Lambda Centaurus	3.1	185	56.8	56.4	56.2	56.2	56.3	56.5	56.8	57.0	57.1	57.1	56.8	56.4	-63	04.0	04.1	04.3	04.5	04.6	04.7	04.7	04.6	04.5	04.4	04.3	04.3
Xi Hydra	3.5	186	38.0	37.8	37.7	37.6	37.7	37.8	37.9	38.0	38.0	37.9	37.8	37.5	-31	54.4	54.5	54.7	54.8	54.9	54.9	54.9	54.8	54.7	54.6	54.6	54.6
Giauzar	3.8	187	00.3	59.8	59.5	59.5	59.7	00.1	00.4	00.7	00.8	00.8	00.5	00.1	69	16.5	16.5	16.6	16.8	16.9	17.0	16.9	16.8	16.7	16.5	16.3	16.2
Pi Centaurus	3.9	189	38.4	38.1	38.0	38.0	38.1	38.3	38.4	38.6	38.7	38.6	38.4	38.0	-54	32.2	32.4	32.6	32.8	32.9	32.9	32.9	32.8	32.7	32.6	32.5	32.5
Delta Crater	3.6	190	02.8	02.6	02.5	02.5	02.5	02.6	02.7	02.7	02.7	02.7	02.5	02.3	-14	49.7	49.8	49.9	50.0	50.0	50.0	49.9	49.9	49.8	49.8	49.8	49.9
Alula Borealis	3.5	190	15.1	14.9	14.8	14.7	14.8	14.9	15.0	15.1	15.1	15.0	14.8	14.6	33	02.4	02.4	02.4	02.5	02.6	02.6	02.6	02.6	02.5	02.4	02.3	02.2
Alula Australis	3.8	190	19.7	19.4	19.3	19.3	19.3	19.4	19.5	19.6	19.6	19.5	19.4	19.1	31	28.5	28.4	28.4	28.5	28.6	28.6	28.6	28.6	28.5	28.4	28.3	28.2
Chort	3.3	191	19.0	18.7	18.6	18.6	18.6	18.7	18.8	18.9	18.8	18.8	18.6	18.4	15	22.6	22.6	22.6	22.6	22.6	22.7	22.7	22.7	22.6	22.6	22.5	22.4
Zozma	2.6	191	20.8	20.6	20.5	20.5	20.5	20.6	20.7	20.7	20.7	20.7	20.5	20.3	20	28.3	28.2	28.2	28.2	28.3	28.3	28.3	28.3	28.3	28.2	28.1	28.0
Psi Ursae Major	3.0	192	27.0	26.7	26.6	26.6	26.7	26.8	26.9	27.0	27.0	27.0	26.8	26.5	44	26.7	26.7	26.7	26.8	26.9	27.0	27.0	26.9	26.8	26.7	26.5	26.4
BS 4337	3.9	192	45.1	44.8	44.6	44.6	44.8	45.0	45.2	45.4	45.4	45.4	45.1	44.7	-59	01.2	01.4	01.6	01.8	01.9	01.9	01.9	01.8	01.7	01.6	01.5	01.5
Dubhe	1.8	193	55.1	54.8	54.6	54.6	54.8	55.0	55.3	55.4	55.5	55.4	55.1	54.7	61	41.8	41.8	41.9	42.1	42.2	42.2	42.2	42.1	41.9	41.8	41.6	41.5
Merak	2.4	194	23.7	23.4	23.2	23.2	23.3	23.6	23.7	23.9	23.9	23.8	23.5	23.2	56	19.7	19.7	19.8	19.9	20.0	20.1	20.1	20.0	19.8	19.7	19.5	19.4
u Carina	3.8	196	31.7	31.5	31.3	31.4	31.5	31.8	32.0	32.1	32.2	32.1	31.8	31.4	-58	53.9	54.0	54.2	54.4	54.5	54.6	54.5	54.4	54.3	54.2	54.1	54.1
Praecipula	3.8	196	32.3	32.1	32.0	32.0	32.1	32.2	32.3	32.3	32.3	32.2	32.0	31.8	34	09.7	09.7	09.7	09.8	09.9	09.9	09.9	09.9	09.8	09.7	09.6	09.4
Nu Hydra	3.1	197	28.6	28.4	28.3	28.3	28.4	28.5	28.5	28.6	28.6	28.5	28.3	28.1	-16	14.5	14.6	14.7	14.8	14.8	14.8	14.7	14.7	14.6	14.6	14.6	14.7
Mu Velorum	2.7	198	12.3	12.1	12.0	12.0	12.1	12.3	12.4	12.5	12.6	12.5	12.2	11.9	-49	27.9	28.1	28.3	28.4	28.5	28.6	28.5	28.4	28.3	28.2	28.1	28.2
Theta Carina	2.7	199	10.5	10.1	10.0	10.1	10.3	10.6	10.9	11.1	11.2	11.0	10.7	10.2	-64	26.3	26.5	26.7	26.8	27.0	27.0	27.0	26.9	26.7	26.6	26.5	26.5
Rho Leo	3.9	201	40.3	40.1	40.0	40.0	40.1	40.2	40.3	40.3	40.3	40.2	40.0	39.7	9	15.5	15.4	15.4	15.4	15.4	15.4	15.5	15.5	15.5	15.4	15.3	15.2
BS 4140	3.4	201	54.4	54.2	54.1	54.2	54.4	54.6	54.9	55.0	55.1	54.9	54.6	54.2	-61	43.7	43.9	44.1	44.2	44.4	44.4	44.4	44.3	44.1	44.0	43.9	43.9
BS 4114	3.8	202	56.5	56.2	56.1	56.2	56.4	56.6	56.9	57.0	57.0	56.9	56.6	56.2	-58	46.9	47.1	47.3	47.5	47.6	47.6	47.6	47.5	47.3	47.2	47.1	47.1
Mu Hydra	3.8	203	21.7	21.6	21.5	21.5	21.6	21.7	21.7	21.8	21.7	21.6	21.5	21.2	-16	52.9	53.1	53.2	53.2	53.3	53.3	53.2	53.2	53.1	53.1	53.1	53.2
Tania Australis	3.1	204	16.5	16.3	16.2	16.2	16.3	16.4	16.6	16.6	16.5	16.4	16.2	15.9	41	27.0	27.0	27.1	27.1	27.2	27.2	27.2	27.2	27.1	26.9	26.8	26.7
Algieba	2.0	204	52.5	52.3	52.2	52.3	52.3	52.4	52.5	52.5	52.5	52.4	52.2	51.9	19	47.6	47.5	47.5	47.6	47.6	47.6	47.6	47.6	47.6	47.5	47.4	47.3
Tania Borealis	3.4	205	34.9	34.6	34.5	34.6	34.7	34.8	34.9	35.0	34.9	34.8	34.6	34.3	42	51.9	51.9	52.0	52.1	52.1	52.2	52.1	52.1	52.0	51.8	51.7	51.6
BS4050	3.4	205	38.8	38.6	38.5	38.6	38.8	39.1	39.4	39.5	39.5	39.4	39.0	38.6	-61	22.5	22.6	22.8	23.0	23.1	23.1	23.1	23.0	22.8	22.7	22.6	22.7
Adhafera	3.4	205	41.7	41.5	41.4	41.4	41.5	41.6	41.7	41.7	41.6	41.5	41.3	41.1	23	22.2	22.1	22.1	22.2	22.2	22.2	22.3	22.2	22.2	22.1	22.0	21.9
BS 4023	3.8	206	12.9	12.7	12.6	12.7	12.8	13.0	13.1	13.2	13.1	13.0	12.8	12.5	-42	09.9	10.0	10.2	10.3	10.4	10.4	10.4	10.3	10.2	10.1	10.0	10.1
Omega Carina	3.3	206	30.3	30.0	29.9	30.1	30.4	30.9	31.2	31.5	31.5	31.3	30.9	30.3	-70	04.7	04.9	05.1	05.3	05.4	05.5	05.4	05.3	05.1	05.0	04.9	05.0
Lambda Hydra	3.6	207	14.2	14.0	14.0	14.0	14.1	14.2	14.2	14.3	14.2	14.1	13.9	13.7	-12	23.9	24.1	24.2	24.2	24.2	24.2	24.2	24.1	24.1	24.0	24.1	24.1
Regulus	1.4	207	46.8	46.6	46.5	46.6	46.6	46.7	46.8	46.8	46.8	46.6	46.5	46.2	11	55.3	55.2	55.2	55.2	55.2	55.2	55.3	55.3	55.2	55.2	55.1	55.0
Eta Leo	3.5	208	02.2	02.0	01.9	02.0	02.1	02.2	02.2	02.2	02.2	02.0	01.9	01.6	16	43.0	42.9	42.9	42.9	43.0	43.0	43.0	43.0	43.0	42.9	42.8	42.7
Tseen Ke	3.5	210	41.9	41.7	41.7	41.8	42.0	42.2	42.4	42.4	42.4	42.3	42.0	41.6	-54	36.5	36.7	36.8	37.0	37.1	37.1	37.0	36.9	36.8	36.7	36.6	36.7
Rasalas	3.9	211	40.4	40.2	40.1	40.2	40.3	40.4	40.4	40.4	40.4	40.2	40.0	39.8	25	57.7	57.7	57.7	57.7	57.8	57.8	57.8	57.8	57.7	57.6	57.5	57.4
Upsilon Ursae Major	3.8	212	04.8	04.5	04.4	04.5	04.8	05.0	05.2	05.2	05.1	04.9	04.6	04.1	58	59.5	59.6	59.7	59.8	59.9	59.9	59.8	59.7	59.5	59.4	59.3	59.2
Upsilon Carina	3.0	213	09.6	09.4	09.4	09.6	09.9	10.2	10.5	10.6	10.6	10.4	10.0	09.5	-65	06.6	06.8	07.0	07.2	07.3							

Name	Mag	Sidereal Hour Angle												Declination													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Turais	2.3	220	39.5	39.4	39.4	39.6	39.8	40.1	40.3	40.4	40.3	40.1	39.7	39.4	-59	18.6	18.8	19.0	19.1	19.2	19.2	19.1	19.0	18.8	18.7	18.7	18.8
Theta Hydra	3.9	221	17.0	16.9	16.9	16.9	17.0	17.1	17.2	17.1	17.0	16.9	16.7	16.4	2	16.5	16.4	16.4	16.4	16.4	16.4	16.4	16.5	16.5	16.5	16.4	16.3
Miaplacidus	1.7	221	39.9	39.8	39.8	40.2	40.6	41.0	41.3	41.5	41.4	41.1	40.6	40.1	-69	45.1	45.3	45.5	45.6	45.7	45.7	45.6	45.5	45.3	45.2	45.1	45.2
Canopus	3.4	222	11.4	11.3	11.3	11.5	11.8	12.0	12.2	12.3	12.2	12.0	11.6	11.2	-59	00.1	00.3	00.4	00.6	00.7	00.6	00.6	00.4	00.3	00.2	00.1	00.2
Suhail	2.2	222	54.6	54.5	54.5	54.6	54.8	55.0	55.1	55.1	55.0	54.8	54.6	54.3	-43	28.0	28.2	28.4	28.5	28.5	28.5	28.4	28.3	28.2	28.1	28.1	28.2
BS 3614	3.8	223	52.5	52.4	52.4	52.6	52.8	52.9	53.1	53.1	53.0	52.8	52.5	52.2	-47	07.9	08.1	08.2	08.4	08.4	08.4	08.3	08.2	08.0	07.9	07.9	08.0
Talitha Australis	3.6	223	55.7	55.5	55.5	55.6	55.8	55.9	56.0	56.0	55.8	55.6	55.3	55.0	47	07.1	07.1	07.2	07.3	07.3	07.3	07.2	07.1	07.0	06.9	06.8	06.8
Talitha	3.1	225	01.9	01.7	01.7	01.8	02.0	02.2	02.2	02.2	02.1	01.8	01.5	01.2	48	00.2	00.3	00.3	00.4	00.5	00.4	00.4	00.3	00.2	00.1	00.0	59.9
Zeta Hydra	3.1	226	01.5	01.3	01.3	01.4	01.5	01.6	01.6	01.6	01.5	01.3	01.1	00.8	5	54.6	54.5	54.5	54.5	54.5	54.5	54.6	54.6	54.6	54.6	54.5	54.4
BS 3571	3.8	226	10.7	10.6	10.6	10.9	11.1	11.4	11.6	11.7	11.6	11.3	11.0	10.6	-60	40.6	40.8	41.0	41.1	41.2	41.1	41.0	40.9	40.7	40.6	40.6	40.7
Epsilon Hydra	3.4	228	10.7	10.6	10.6	10.7	10.8	10.9	10.9	10.8	10.7	10.6	10.3	10.1	6	23.1	23.0	23.0	23.0	23.0	23.0	23.0	23.1	23.1	23.0	23.0	22.9
Delta Vela	1.9	228	45.2	45.1	45.1	45.3	45.6	45.8	45.9	46.0	45.9	45.6	45.3	45.0	-54	44.4	44.6	44.7	44.9	44.9	44.9	44.8	44.6	44.5	44.4	44.4	44.5
Asellus Australis	3.9	228	41.5	41.4	41.4	41.4	41.6	41.7	41.7	41.6	41.5	41.3	41.1	40.8	18	07.2	07.1	07.1	07.2	07.2	07.2	07.2	07.2	07.2	07.1	07.0	07.0
Alpha Pyxis	3.7	229	00.2	00.1	00.1	00.2	00.4	00.5	00.6	00.6	00.5	00.3	00.0	59.8	-33	13.1	13.2	13.4	13.5	13.5	13.4	13.3	13.2	13.1	13.1	13.1	13.2
BS 3445	3.8	229	45.6	45.5	45.6	45.7	45.9	46.1	46.2	46.2	46.1	45.9	45.6	45.3	-46	40.7	40.9	41.1	41.2	41.2	41.2	41.1	41.0	40.8	40.7	40.7	40.8
Omicron Velorum	3.6	229	51.2	51.1	51.2	51.4	51.6	51.8	51.9	51.9	51.8	51.6	51.3	51.0	-62	57.1	57.3	57.5	57.6	57.6	57.6	57.5	57.3	57.2	57.1	57.1	57.2
Muscida	3.4	232	13.9	13.7	13.7	13.9	14.1	14.4	14.5	14.4	14.2	13.8	13.4	13.0	60	41.1	41.2	41.3	41.4	41.4	41.4	41.3	41.2	41.0	40.9	40.8	40.8
Beta Volans	3.8	233	31.8	31.8	31.9	32.3	32.6	33.0	33.2	33.3	33.1	32.8	32.3	31.9	-66	09.9	10.1	10.2	10.4	10.4	10.4	10.3	10.1	09.9	09.9	09.8	09.9
BS 3314	3.9	233	27.8	27.7	27.8	27.8	27.9	28.0	28.1	28.0	27.9	27.7	27.5	27.2	-3	56.2	56.3	56.3	56.4	56.3	56.3	56.3	56.2	56.2	56.2	56.2	56.3
Avior	2.0	234	18.9	18.9	19.0	19.2	19.5	19.8	20.0	20.0	19.8	19.5	19.2	18.8	-59	32.2	32.4	32.5	32.7	32.7	32.6	32.5	32.4	32.2	32.1	32.1	32.2
Altarf	3.5	235	44.4	44.3	44.3	44.4	44.5	44.6	44.6	44.5	44.4	44.2	44.0	43.8	9	09.4	09.4	09.3	09.3	09.3	09.4	09.4	09.4	09.4	09.4	09.3	09.3
Suhail	1.8	237	32.3	32.2	32.3	32.5	32.7	32.9	33.0	33.0	32.8	32.6	32.3	32.0	-47	21.7	21.9	22.0	22.1	22.1	22.1	22.0	21.8	21.7	21.6	21.6	21.8
Rho Puppis	2.8	238	00.6	00.5	00.5	00.7	00.8	00.9	00.9	00.9	00.7	00.6	00.3	00.1	-24	19.8	19.9	20.0	20.1	20.1	20.0	20.0	19.8	19.8	19.7	19.8	19.9
Naos	2.2	239	01.0	00.9	01.0	01.1	01.3	01.5	01.5	01.5	01.3	01.1	00.8	00.6	-40	01.6	01.8	01.9	02.0	02.0	02.0	01.9	01.7	01.6	01.6	01.6	01.7
Chi Carina	3.5	240	44.3	44.3	44.4	44.6	44.9	45.1	45.2	45.1	45.0	44.7	44.4	44.1	-53	00.3	00.5	00.6	00.7	00.7	00.7	00.5	00.4	00.3	00.2	00.2	00.3
BS 3080	3.7	241	51.6	51.5	51.6	51.8	51.9	52.1	52.1	52.1	51.9	51.7	51.4	51.2	-40	35.9	36.0	36.2	36.3	36.3	36.2	36.1	35.9	35.8	35.8	35.8	35.9
Asmidiske	3.3	242	34.4	34.3	34.4	34.5	34.6	34.8	34.8	34.7	34.6	34.4	34.1	33.9	-24	52.9	53.1	53.2	53.2	53.2	53.1	53.0	52.9	52.8	52.8	52.9	53.0
Pollux	1.2	243	31.4	31.3	31.3	31.4	31.6	31.6	31.6	31.5	31.4	31.1	30.9	30.6	28	00.2	00.2	00.2	00.3	00.3	00.3	00.2	00.2	00.2	00.1	00.1	00.0
c Puppis	3.6	243	35.8	35.8	35.9	36.0	36.2	36.3	36.4	36.3	36.2	35.9	35.7	35.4	-37	59.4	59.5	59.7	59.7	59.7	59.7	59.5	59.4	59.3	59.2	59.3	59.4
Kappa Gemini	3.6	243	44.5	44.4	44.5	44.6	44.7	44.8	44.8	44.7	44.5	44.3	44.0	43.8	24	22.5	22.5	22.5	22.6	22.6	22.6	22.6	22.5	22.5	22.5	22.4	22.4
Alpha Monoceros	3.9	244	34.3	34.3	34.3	34.4	34.5	34.6	34.6	34.5	34.4	34.2	34.0	33.7	-9	34.3	34.4	34.5	34.5	34.5	34.5	34.4	34.3	34.3	34.3	34.3	34.4
Procyon	0.4	245	02.9	02.8	02.8	02.9	03.0	03.1	03.1	03.0	02.9	02.7	02.4	02.2	5	12.1	12.0	12.0	12.0	12.0	12.0	12.1	12.1	12.1	12.1	12.0	12.0
Castor	1.6	246	11.8	11.7	11.7	11.9	12.0	12.1	12.0	11.9	11.7	11.5	11.2	11.0	31	52.0	52.1	52.1	52.1	52.1	52.1	52.1	52.0	52.0	51.9	51.9	51.9
Sigma Puppis	3.3	247	36.7	36.7	36.8	37.0	37.2	37.3	37.4	37.3	37.1	36.9	36.6	36.3	-43	19.1	19.3	19.4	19.5	19.5	19.4	19.3	19.1	19.0	18.9	19.0	19.1
Gomeisa	2.9	248	04.9	04.8	04.8	04.9	05.1	05.1	05.1	05.0	04.8	04.6	04.4	04.2	8	16.3	16.2	16.2	16.2	16.2	16.2	16.2	16.3	16.3	16.3	16.2	16.1
Iota Gemini	3.8	248	25.1	25.0	25.1	25.2	25.3	25.4	25.3	25.2	25.0	24.8	24.5	24.3	27	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.7	46.7	46.6	46.6
Aludra	2.5	248	52.7	52.7	52.7	52.9	53.0	53.1	53.2	53.1	52.9	52.7	52.4	52.2	-29	19.2	19.4	19.5	19.5	19.5	19.4	19.3	19.2	19.1	19.0	19.1	19.2
Wasat	3.5	249	49.5	49.4	49.5	49.6	49.7	49.8	49.7	49.6	49.4	49.2	49.0	48.7	21	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.8	57.8
Lambda Gemini	3.6	250	20.3	20.2	20.2	20.4	20.5	20.5	20.5	20.4	20.2	20.0	19.8	19.5	16	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.4	31.3
Pi Puppis	2.7	250	37.5	37.5	37.6	37.8	38.0	38.1	38.1	38.0	37.8	37.6	37.4	37.1	-37	06.8	06.9	07.0	07.1	07.1	07.0	06.9	06.7	06.6	06.6	06.6	06.8
Gamma Volans	3.8	252	49.1	49.2	49.5	50.0	50.6	50.9	51.1	51.1	50.7	50.3	49.7	49.3	-70	30.7	30.9	31.0	31.1	31.1	31.0	30.9	30.7	30.6	30.5	30.5	30.7
Wezen	1.8	252	48.1	48.1	48.2	48.3	48.4	48.5	48.5	48.4	48.3	48.0	47.8	47.6	-26	24.4	24.6	24.7	24.7	24.7	24.6	24.5	24.4	24.3	24.2	24.3	24.4
Omicron Canis Major	3.0	254	08.5	08.4	08.5	08.7	08.8	08.9	08.9	08.8	08.6	08.4	08.1	07.9	-23	50.8	50.9	51.0	51.0	51.0	50.9	50.8	50.7	50.6	50.6	50.6	50.8
Sigma Canis Major	3.5	254	28.3	28.3	28.4	28.5	28.7	28.8	28.7	28.6	28.5	28.2	28.0	27.8	-27	56.8	57.0	57.1	57.1	57.1	57.0	56.9	56.8	56.7	56.6	56.7	56.8
Adara	1.5	255	14.8	14.8	14.8	15.0	15.1	15.2	15.2	15.1	14.9	14.7	14.5	14.3	-28	59.0	59.2	59.3	59.3	59.3	59.2	59.1	59.0	58.9	58.8	58.9	59.0
Theta Gemini	3.6	256	38.6	38.5	38.6	38.7	38.9	38.9	38.9	38.7	38.5	38.2	38.0	37.7	33	57.0	57.1	57.1	57.1	57.1	57.1	57.0	57.0	56.9	56.9	56.9	56.9
Tau Puppis	2.9	257	27.0	27.0	27.2	27.4	27.7	27.8	27.9	27.8	27.5	27.3	26.9	26.7	-50	37.5	37.6	37.8	37.8	37.8	37.7	37.5	37.4	37.2	37.2	37.3	37.4
Kappa Canis Major	3.5	257	26.8	26.8	26.9	27.1	27.2	27.3	27.3	27.2	27.0	26.8	26.5	26.3	-32	31.1	31.2	31.3	31.4	31.4	3						

Name	Mag	Sidereal Hour Angle												Declination														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Theta Auriga	2.7	269	54.3	54.3	54.4	54.5	54.6	54.7	54.6	54.4	54.1	53.8	53.6	53.3	37	12.9	12.9	12.9	12.9	12.9	12.8	12.8	12.8	12.8	12.7	12.7	12.7	12.8
Menkalinan	1.9	269	56.4	56.4	56.5	56.7	56.8	56.9	56.8	56.5	56.2	55.9	55.6	55.4	44	57.0	57.0	57.1	57.1	57.0	57.0	56.9	56.8	56.8	56.8	56.8	56.8	56.9
Prijipati	3.7	269	55.1	55.1	55.2	55.4	55.6	55.7	55.6	55.3	54.9	54.6	54.2	53.9	54	17.2	17.3	17.3	17.3	17.3	17.2	17.1	17.0	17.0	17.0	17.0	17.1	
Eta Columba	3.9	270	08.1	08.1	08.3	08.5	08.7	08.8	08.7	08.6	08.4	08.1	07.8	07.7	-42	48.9	49.0	49.1	49.1	49.0	48.9	48.8	48.6	48.5	48.5	48.6	48.7	
Eta Lepus	3.7	270	47.2	47.3	47.4	47.5	47.6	47.6	47.6	47.4	47.2	47.0	46.8	46.6	-14	09.9	10.0	10.1	10.1	10.1	10.0	09.9	09.8	09.7	09.7	09.8	09.9	
Betelgeuse	0.6	271	04.6	04.6	04.6	04.8	04.9	04.9	04.8	04.6	04.4	04.2	04.0	03.8	7	24.6	24.5	24.5	24.5	24.5	24.5	24.6	24.6	24.7	24.7	24.6	24.6	
Delta Lepus	3.8	272	03.8	03.9	04.0	04.1	04.2	04.3	04.2	04.1	03.8	03.6	03.4	03.2	-20	52.7	52.8	52.9	52.9	52.8	52.7	52.6	52.5	52.4	52.4	52.5	52.6	
Wezn	3.1	272	10.3	10.3	10.5	10.7	10.8	10.9	10.8	10.7	10.4	10.2	10.0	09.8	-35	45.9	46.0	46.1	46.1	46.0	45.9	45.8	45.6	45.5	45.5	45.6	45.8	
Saiph	2.1	272	56.7	56.7	56.8	57.0	57.1	57.1	57.0	56.9	56.6	56.4	56.2	56.0	-9	40.0	40.0	40.1	40.1	40.1	40.0	39.9	39.8	39.7	39.7	39.8	39.9	
Beta Pictor	3.9	273	06.9	07.0	07.2	07.5	07.7	07.8	07.8	07.6	07.3	07.0	06.7	06.6	-51	03.8	03.9	04.0	04.0	03.9	03.8	03.7	03.5	03.4	03.4	03.5	03.6	
Zeta Lepus	3.6	273	09.0	09.0	09.1	09.3	09.4	09.4	09.3	09.2	09.0	08.8	08.5	08.4	-14	49.1	49.2	49.2	49.2	49.2	49.1	49.0	48.9	48.9	48.8	48.9	49.0	
Gamma Lepus	3.6	273	46.9	46.9	47.0	47.2	47.3	47.3	47.3	47.1	46.9	46.7	46.5	46.3	-22	26.7	26.8	26.9	26.9	26.8	26.7	26.6	26.5	26.4	26.4	26.5	26.6	
Alnitak	1.7	274	41.3	41.3	41.4	41.5	41.6	41.6	41.5	41.4	41.1	40.9	40.7	40.6	-1	56.2	56.3	56.3	56.3	56.3	56.3	56.2	56.1	56.1	56.1	56.1	56.2	
Phact	2.7	274	59.8	59.9	00.0	00.2	00.3	00.4	00.3	00.2	59.9	59.7	59.5	59.3	-34	04.2	04.3	04.4	04.4	04.3	04.2	04.0	03.9	03.8	03.8	03.9	04.0	
Sigma Orion	3.8	275	11.5	11.5	11.6	11.7	11.8	11.8	11.8	11.6	11.4	11.2	10.9	10.8	-2	35.7	35.7	35.8	35.8	35.7	35.7	35.6	35.5	35.5	35.5	35.5	35.6	
Zeta Taurus	3.0	275	26.7	26.7	26.8	26.9	27.0	27.0	26.9	26.7	26.5	26.2	26.0	25.8	21	08.9	08.9	08.9	08.9	08.9	08.9	08.9	08.9	09.0	09.0	09.0	08.9	
Alnilam	1.7	275	49.4	49.4	49.5	49.6	49.7	49.7	49.7	49.5	49.3	49.1	48.8	48.7	-1	11.7	11.8	11.8	11.8	11.8	11.8	11.7	11.6	11.6	11.6	11.7	11.8	
Na'ir al Saif	2.8	276	01.4	01.4	01.5	01.6	01.7	01.7	01.6	01.5	01.3	01.0	00.8	00.7	-5	54.2	54.3	54.3	54.3	54.3	54.2	54.1	54.1	54.0	54.0	54.0	54.1	
Heka	3.4	276	04.9	04.9	05.0	05.2	05.2	05.3	05.2	05.0	04.8	04.5	04.3	04.2	9	56.5	56.4	56.4	56.4	56.4	56.4	56.5	56.5	56.6	56.6	56.5	56.5	
Beta Dorado	3.8	276	33.7	33.9	34.2	34.6	34.9	35.0	35.0	34.8	34.5	34.1	33.7	33.5	-62	29.0	29.2	29.3	29.3	29.2	29.0	28.8	28.7	28.6	28.6	28.7	28.9	
Arneb	2.6	276	42.6	42.6	42.7	42.8	43.0	43.0	42.9	42.7	42.5	42.3	42.1	41.9	-17	48.9	49.0	49.1	49.1	49.0	48.9	48.8	48.7	48.7	48.6	48.7	48.8	
Mintaka	2.2	276	52.5	52.5	52.6	52.7	52.8	52.8	52.7	52.5	52.3	52.1	51.9	51.7	-0	17.5	17.6	17.6	17.6	17.6	17.5	17.5	17.4	17.3	17.3	17.4	17.4	
Epsilon Columba	3.9	277	06.5	06.5	06.7	06.9	07.0	07.0	07.0	06.8	06.6	06.3	06.1	06.0	-35	27.8	28.0	28.0	28.0	28.0	27.8	27.7	27.5	27.5	27.5	27.5	27.7	
Nihal	2.8	277	50.0	50.0	50.2	50.3	50.4	50.4	50.4	50.2	50.0	49.7	49.5	49.4	-20	45.1	45.2	45.3	45.3	45.2	45.1	45.0	44.9	44.8	44.8	44.9	45.0	
Alnath	1.7	278	16.5	16.5	16.6	16.7	16.8	16.8	16.7	16.5	16.2	16.0	15.7	15.5	28	37.0	37.0	37.0	37.0	37.0	37.0	36.9	36.9	36.9	37.0	37.0	37.0	
Bellatrix	1.7	278	35.2	35.3	35.4	35.5	35.6	35.6	35.5	35.3	35.1	34.8	34.6	34.5	6	21.5	21.5	21.5	21.5	21.5	21.5	21.6	21.6	21.7	21.7	21.6	21.6	
Eta Orion	3.4	278	45.5	45.5	45.6	45.8	45.9	45.9	45.8	45.6	45.4	45.2	45.0	44.8	-2	23.3	23.4	23.4	23.4	23.4	23.3	23.2	23.2	23.1	23.1	23.1	23.2	
Tau Orion	3.6	280	28.8	28.9	29.0	29.1	29.2	29.2	29.1	28.9	28.7	28.5	28.3	28.1	-6	50.0	50.1	50.2	50.2	50.1	50.0	50.0	49.9	49.8	49.8	49.9	49.9	
Capella	0.1	280	38.9	39.0	39.1	39.3	39.4	39.4	39.3	39.0	38.7	38.4	38.1	37.8	46	00.6	00.6	00.6	00.6	00.6	00.5	00.4	00.4	00.4	00.4	00.4	00.5	
Rigel	0.3	281	14.9	15.0	15.1	15.2	15.3	15.3	15.2	15.0	14.8	14.6	14.4	14.2	-8	11.4	11.5	11.6	11.6	11.5	11.4	11.3	11.3	11.2	11.2	11.2	11.3	
Mu Lepus	3.3	281	39.4	39.5	39.6	39.7	39.8	39.8	39.7	39.6	39.3	39.1	38.9	38.8	-16	11.7	11.8	11.8	11.8	11.7	11.6	11.5	11.4	11.4	11.4	11.4	11.5	
Cursa	2.8	282	55.1	55.1	55.2	55.4	55.4	55.4	55.3	55.1	54.9	54.7	54.5	54.4	-5	04.5	04.5	04.5	04.5	04.5	04.4	04.4	04.3	04.2	04.2	04.3	04.3	
Hoedus II	3.2	283	12.1	12.1	12.3	12.4	12.5	12.5	12.4	12.1	11.8	11.5	11.3	11.1	-41	14.9	15.0	15.0	15.0	14.9	14.9	14.8	14.8	14.8	14.8	14.9	14.9	
Epsilon Lepus	3.2	283	31.8	31.9	32.0	32.2	32.3	32.3	32.2	32.0	31.8	31.6	31.4	31.2	-22	21.5	21.6	21.7	21.7	21.6	21.5	21.4	21.2	21.2	21.2	21.3	21.4	
Haedi	3.8	284	12.7	12.7	12.9	13.0	13.1	13.1	13.0	12.7	12.4	12.1	11.9	11.7	41	05.5	05.5	05.5	05.5	05.5	05.4	05.4	05.3	05.3	05.4	05.4	05.5	
Al Anz	3.0	284	20.0	20.1	20.2	20.4	20.5	20.5	20.3	20.1	19.8	19.5	19.2	19.0	43	50.3	50.4	50.4	50.4	50.3	50.3	50.2	50.2	50.2	50.2	50.3	50.3	
Hassaleh	2.7	285	35.7	35.7	35.8	36.0	36.0	36.0	35.9	35.6	35.4	35.1	34.9	34.7	33	10.9	11.0	11.0	11.0	10.9	10.9	10.9	10.9	10.9	10.9	10.9	11.0	
Pi5 Orion	3.7	286	18.7	18.7	18.8	18.9	19.0	19.0	18.9	18.7	18.4	18.2	18.0	17.9	2	27.4	27.3	27.3	27.3	27.3	27.4	27.4	27.5	27.6	27.6	27.6	27.5	
Pi4 Orion	3.7	287	04.2	04.2	04.3	04.5	04.5	04.5	04.4	04.2	03.9	03.7	03.5	03.4	5	37.3	37.3	37.2	37.2	37.2	37.3	37.3	37.4	37.5	37.5	37.5	37.4	
Pi3 Orion	3.2	287	24.5	24.6	24.7	24.8	24.9	24.8	24.7	24.5	24.3	24.1	23.9	23.7	6	58.7	58.7	58.6	58.6	58.6	58.7	58.7	58.8	58.8	58.9	58.8	58.8	
Sceptrum	3.9	290	20.6	20.7	20.8	20.9	21.0	21.0	20.9	20.7	20.4	20.2	20.0	19.9	-14	17.2	17.2	17.3	17.3	17.2	17.1	17.0	16.9	16.8	16.8	16.9	17.0	
Nu Eridanus	3.9	290	48.0	48.0	48.1	48.2	48.3	48.3	48.2	47.9	47.7	47.5	47.3	47.2	-3	20.0	20.1	20.1	20.1	20.0	20.0	19.9	19.8	19.7	19.7	19.8	19.8	
Aldebaran	1.0	290	52.9	52.9	53.1	53.2	53.2	53.2	53.1	52.8	52.6	52.4	52.2	52.0	16	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.8	31.8	31.9	31.9	31.8	
Theemim	3.8	291	01.0	01.1	01.2	01.4	01.5	01.5	01.3	01.1	00.9	00.7	00.5	00.4	-30	32.7	32.8	32.8	32.8	32.7	32.5	32.4	32.3	32.2	32.2	32.3	32.4	
Alpha Dorado	3.3	291	26.5	26.7	26.9	27.2	27.4	27.4	27.3	27.1	26.8	26.4	26.2	26.1	-55	01.6	01.8	01.8	01.7	01.6	01.4	01.3	01.1	01.1	01.1	01.2	01.4	
Theta2 Taurus	3.4	292	41.8	41.9	42.0	42.1	42.1	42.1	42.0	41.7	41.5	41.3	41.1	41.0	15	53.6	53.5	53.5	53.5	53.5	53.5	53.6	53.6	53.6	53.7	53.7	53.7	
Ain	3.5	292	42.3	42.4	42.5	42.6	42.7	42.6	42.5	42.2	42.0	41.8	41.6	41.4	19	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.2	12.2	12.2	12.2	12.2	
Secundus Hyadum	3.8	294	07.7	07.7	07.8	07.9	08.0	07.9	07.8	07.6	07.3	07.1	06.9	06.8	17	33.9	33.9	33.9	33.9	33.9	33.9	34.						

Name	Mag	Sidereal Hour Angle												Declination													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Maia	3.9	303	24.0	24.1	24.2	24.4	24.4	24.3	24.1	23.9	23.6	23.4	23.2	23.1	24	23.9	23.9	23.9	23.9	23.8	23.8	23.8	23.9	24.0	24.0	24.0	24.1
Nu Perseus	3.8	303	32.3	32.4	32.6	32.7	32.7	32.6	32.4	32.1	31.8	31.5	31.3	31.2	42	36.6	36.7	36.7	36.6	36.5	36.5	36.4	36.5	36.5	36.6	36.7	36.7
Electra	3.7	303	38.3	38.4	38.5	38.6	38.7	38.6	38.4	38.1	37.9	37.7	37.5	37.4	24	08.7	08.7	08.6	08.6	08.6	08.6	08.6	08.6	08.7	08.8	08.8	08.8
Atik	3.9	303	46.2	46.3	46.4	46.5	46.6	46.5	46.3	46.0	45.7	45.5	45.3	45.2	32	19.2	19.2	19.2	19.1	19.1	19.1	19.1	19.1	19.2	19.2	19.3	19.3
Beta Reticulum	3.8	303	54.5	54.9	55.2	55.6	55.8	55.8	55.6	55.3	54.8	54.5	54.2	54.2	-64	46.8	46.9	46.9	46.8	46.6	46.5	46.3	46.2	46.1	46.2	46.3	46.5
Rana	3.5	304	04.3	04.4	04.5	04.6	04.7	04.6	04.5	04.2	04.0	03.8	03.7	03.6	-9	43.9	44.0	44.0	44.0	43.9	43.8	43.7	43.6	43.6	43.6	43.6	43.7
Delta Perseus	3.0	304	05.9	06.0	06.2	06.3	06.3	06.2	06.0	05.7	05.3	05.1	04.8	04.7	47	49.2	49.3	49.2	49.2	49.1	49.0	49.0	49.0	49.0	49.1	49.2	49.3
Epsilon Eridanus	3.7	306	39.2	39.3	39.4	39.5	39.6	39.5	39.3	39.1	38.9	38.7	38.5	38.5	-9	25.6	25.7	25.7	25.7	25.6	25.5	25.4	25.3	25.3	25.3	25.3	25.4
Xi Taurus	3.7	308	04.7	04.8	04.9	05.0	05.0	04.9	04.7	04.5	04.2	04.0	03.9	03.8	9	46.0	45.9	45.9	45.9	45.9	46.0	46.0	46.1	46.2	46.2	46.2	46.2
Omicron Taurus	3.6	308	40.1	40.2	40.3	40.4	40.4	40.3	40.1	39.9	39.6	39.4	39.3	39.2	9	03.7	03.7	03.7	03.7	03.7	03.7	03.8	03.9	03.9	04.0	04.0	04.0
Mirfak	1.8	308	44.9	45.0	45.2	45.4	45.4	45.3	45.0	44.7	44.3	44.0	43.8	43.7	49	53.9	53.9	53.9	53.8	53.7	53.6	53.6	53.6	53.7	53.8	53.9	54.0
16 Eridanus	3.7	310	00.8	00.9	01.0	01.1	01.2	01.1	00.9	00.7	00.5	00.3	00.1	00.1	-21	43.5	43.6	43.6	43.5	43.4	43.3	43.2	43.1	43.0	43.0	43.1	43.2
Fornacis	3.8	311	52.7	52.8	52.9	53.1	53.1	53.0	52.8	52.6	52.3	52.1	52.0	52.0	-28	57.2	57.2	57.2	57.2	57.1	56.9	56.8	56.7	56.6	56.6	56.7	56.9
Algol	2.1	312	48.2	48.3	48.4	48.5	48.5	48.4	48.2	47.9	47.6	47.3	47.2	47.1	40	59.7	59.7	59.7	59.6	59.5	59.5	59.5	59.5	59.6	59.7	59.7	59.8
Gorgonea Tertia	3.4	313	33.2	33.3	33.4	33.5	33.5	33.4	33.2	32.9	32.6	32.4	32.2	32.1	38	52.8	52.8	52.7	52.7	52.6	52.6	52.6	52.6	52.7	52.8	52.8	52.9
Gamma Perseus	2.9	313	37.6	37.8	38.0	38.2	38.2	38.0	37.7	37.4	37.0	36.7	36.5	36.4	53	32.8	32.8	32.8	32.7	32.6	32.5	32.5	32.5	32.6	32.7	32.8	32.9
Menkar	2.6	314	18.3	18.4	18.5	18.6	18.6	18.5	18.3	18.1	17.8	17.7	17.5	17.5	4	07.6	07.6	07.5	07.5	07.6	07.6	07.7	07.8	07.9	07.9	07.9	07.8
Acamar	3.2	315	20.5	20.7	20.8	21.0	21.0	20.9	20.7	20.5	20.2	20.0	19.9	19.8	-40	16.2	16.3	16.2	16.2	16.0	15.8	15.7	15.6	15.6	15.6	15.7	15.9
Azha	3.9	315	46.6	46.7	46.8	46.9	46.9	46.8	46.6	46.3	46.1	45.9	45.8	45.8	-8	51.7	51.8	51.8	51.7	51.7	51.6	51.5	51.4	51.3	51.3	51.4	51.4
Tau Perseus	3.9	316	16.0	16.1	16.3	16.5	16.5	16.3	16.0	15.6	15.3	15.0	14.8	14.7	52	48.3	48.3	48.3	48.2	48.1	48.0	48.0	48.0	48.1	48.2	48.3	48.4
Miram	3.8	317	09.1	09.3	09.5	09.6	09.6	09.5	09.1	08.7	08.4	08.1	07.9	07.8	55	56.3	56.3	56.3	56.2	56.1	56.0	56.0	56.0	56.1	56.2	56.3	56.4
41 Aries	3.6	317	21.9	22.0	22.1	22.1	22.1	22.0	21.8	21.5	21.3	21.1	20.9	20.9	27	18.1	18.1	18.0	18.0	17.9	17.9	18.0	18.0	18.1	18.2	18.2	18.3
Kaffajjidmah	3.5	319	03.1	03.2	03.3	03.4	03.3	03.2	03.0	02.8	02.6	02.4	02.3	02.2	3	16.5	16.5	16.5	16.5	16.5	16.6	16.7	16.7	16.8	16.8	16.8	16.8
Polaris	2.0	319	09.4	21.7	33.8	42.4	44.2	38.5	27.0	12.0	57.3	45.9	39.3	39.3	89	18.6	18.7	18.6	18.5	18.4	18.2	18.1	18.1	18.2	18.3	18.5	18.7
Phi Eridanus	3.6	325	47.1	47.3	47.5	47.6	47.6	47.5	47.3	46.9	46.6	46.4	46.4	46.4	-51	28.4	28.4	28.4	28.2	28.1	27.9	27.7	27.6	27.6	27.7	27.9	28.0
Beta Triangulum	3.0	327	28.4	28.5	28.7	28.7	28.7	28.5	28.3	28.0	27.7	27.5	27.4	27.4	35	02.1	02.0	02.0	01.9	01.9	01.8	01.9	01.9	02.0	02.1	02.2	02.3
Hamal	2.0	328	04.4	04.5	04.6	04.7	04.6	04.5	04.3	04.0	03.7	03.6	03.5	03.5	23	30.5	30.5	30.4	30.4	30.4	30.4	30.4	30.5	30.6	30.7	30.7	30.8
Almaak	2.2	328	52.8	53.0	53.1	53.2	53.1	52.9	52.7	52.3	52.1	51.9	51.8	51.7	42	22.7	22.7	22.6	22.5	22.4	22.4	22.4	22.5	22.6	22.7	22.8	22.9
Alrishah	3.8	329	22.0	22.1	22.2	22.2	22.2	22.0	21.8	21.6	21.3	21.2	21.1	21.1	2	48.5	48.5	48.5	48.5	48.5	48.6	48.7	48.8	48.9	48.9	48.9	48.8
Alpha Hydrus	2.9	330	13.7	14.0	14.3	14.4	14.4	14.3	14.0	13.6	13.2	13.0	12.9	13.0	-61	31.8	31.8	31.7	31.5	31.3	31.2	31.0	31.0	31.0	31.1	31.2	31.4
Chi Eridanus	3.7	330	55.0	55.2	55.4	55.5	55.5	55.3	55.0	54.7	54.4	54.2	54.2	54.2	-51	34.0	34.0	34.0	33.8	33.6	33.5	33.3	33.3	33.3	33.4	33.5	33.6
Sheratan	2.7	331	12.6	12.7	12.8	12.8	12.8	12.6	12.4	12.1	11.9	11.8	11.7	11.7	20	51.3	51.3	51.2	51.2	51.2	51.2	51.3	51.4	51.5	51.5	51.6	51.6
Segin	3.4	331	13.8	14.1	14.4	14.5	14.4	14.2	13.7	13.2	12.8	12.5	12.4	12.4	63	43.2	43.2	43.2	43.1	42.9	42.9	42.8	42.9	43.0	43.2	43.3	43.5
Mothallah	3.4	331	35.7	35.8	36.0	36.0	35.9	35.8	35.5	35.2	35.0	34.8	34.8	34.7	29	37.6	37.6	37.5	37.5	37.4	37.4	37.5	37.6	37.7	37.8	37.8	37.9
Baten Kaitos	3.7	332	01.1	01.2	01.3	01.3	01.3	01.1	00.9	00.7	00.5	00.3	00.3	00.3	-10	17.4	17.4	17.4	17.4	17.3	17.2	17.1	17.0	17.0	17.0	17.0	17.1
Tau Cetus	3.5	333	52.4	52.5	52.6	52.6	52.6	52.4	52.2	52.0	51.8	51.6	51.6	51.6	-15	53.4	53.4	53.4	53.4	53.3	53.1	53.0	52.9	52.9	52.9	53.0	53.0
51 Andromeda	3.6	335	21.5	21.6	21.8	21.8	21.8	21.5	21.2	20.9	20.6	20.4	20.3	20.3	48	40.8	40.7	40.7	40.6	40.5	40.4	40.5	40.5	40.7	40.8	40.9	41.0
Achemar	0.5	335	28.8	29.1	29.3	29.4	29.4	29.2	28.9	28.5	28.2	28.0	28.0	28.1	-57	11.7	11.6	11.6	11.4	11.2	11.0	10.9	10.9	10.9	11.0	11.1	11.3
Eta Pisces	3.6	337	00.2	00.3	00.4	00.4	00.4	00.2	00.0	59.7	59.5	59.4	59.3	59.3	15	23.7	23.7	23.6	23.6	23.6	23.6	23.7	23.8	23.9	24.0	24.0	24.0
Delta Phoenix	3.9	337	05.2	05.4	05.6	05.7	05.6	05.4	05.2	04.9	04.6	04.4	04.4	04.5	-49	01.7	01.7	01.6	01.5	01.3	01.2	01.0	01.0	01.0	01.1	01.2	01.3
Gamma Phoenix	3.4	337	48.3	48.5	48.6	48.7	48.6	48.4	48.2	47.9	47.6	47.5	47.5	47.5	-43	16.5	16.5	16.4	16.3	16.1	16.0	15.8	15.8	15.8	15.9	16.0	16.1
Ruchbah	2.7	338	23.6	23.8	24.0	24.1	24.0	23.7	23.3	22.9	22.5	22.3	22.2	22.3	60	17.3	17.3	17.2	17.1	17.0	16.9	16.9	17.0	17.1	17.3	17.4	17.6
Theta Cetus	3.6	338	52.6	52.7	52.8	52.8	52.7	52.6	52.4	52.1	51.9	51.8	51.7	51.8	-8	08.2	08.2	08.2	08.2	08.1	08.0	07.9	07.8	07.7	07.7	07.8	07.8
Mirach	2.1	342	26.2	26.3	26.4	26.4	26.3	26.1	25.9	25.6	25.3	25.2	25.2	25.2	35	40.4	40.3	40.3	40.2	40.1	40.1	40.2	40.3	40.4	40.5	40.6	40.7
Dheneb	3.5	342	44.1	44.2	44.3	44.3	44.2	44.0	43.8	43.6	43.4	43.2	43.2	43.2	-10	08.1	08.1	08.1	08.0	07.9	07.8	07.7	07.6	07.6	07.6	07.6	07.7
Beta Phoenix	3.3	343	22.4	22.6	22.7	22.8	22.7	22.5	22.2	21.9	21.6	21.5	21.5	21.6	-46	40.4	40.4	40.3	40.1	40.0	39.8	39.7	39.6	39.7	39.7	39.9	40.0
Mu Andromeda	3.9	345	41.0	41.1	41.2	41.2	41.1	40.9																			